

Texas Occupational Health and Safety Surveillance: Fundamental Program
Texas Department of State Health Services
ANNUAL REPORT 8473-Villanacci
Performance Period: July 1, 2009-June 30, 2010

John F. Villanacci, Ph.D., NREMTI – Principal Investigator

Tel: 512-458-7269; Fax: 512-458-7222; Email: John.Villanacci@dshs.state.tx.us

Brienne Diebolt-Brown, M.S. – Program Coordinator

Tel: 512-458-7269; Fax: 512-458-7222; Email: brienne.brown@dshs.state.tx.us

The overall aims of the Texas Department of State Health Services (TXDSHS) Occupational Health and Safety Surveillance Fundamental project are to: compile and report data for 13-19 specified occupational health indicators, conduct detailed analysis to identify patterns and trends for these occupational health indicators, pilot other data sources for potential to identify cases of occupational illness and injury, provide training and education to enhance awareness and increase prevention, review and evaluate the Texas occupational safety and health surveillance system process, and assess the public health outcomes of the surveillance system.

Major Accomplishments and Outputs

TXDSHS staff compiled, analyzed and contributed data for 13 occupational health indicators for inclusion in the multi-state Council of State and Territorial Epidemiologists' (CSTE) 13 Occupational Health Indicators Report (2007). Using CFI data (2000-2008), staff initiated an in-depth analysis of highway transportation mortality in the agricultural production and services industries of Texas. Texas Poison Center Network (TPCN) call data was analyzed to explore its usefulness as a data source for occupational carbon monoxide (CO) exposures. Program staff participated with other states and NIOSH in discussions of proposal to add carbon monoxide exposure as an occupational health indicator.

The project aim to enhance awareness of occupational health to prevent injuries was met through TXDSHS participation in the March 2010 MAFO (National Partnership of Rural and Farmworker Organizations) conference in San Antonio. Organizations such as the Department of Labor were represented at this meeting. At the conference program TXDSHS partnered with the Southwest Center for Agricultural Health, Injury Prevention, and Education, University of Texas Health Center staff in a panel to educate farmworkers and farmworker advocates about the dangers of heat exposure and how to avoid illness/injury. Spanish-language promotional materials were shared with others, such as Massachusetts Occupational Health Surveillance Program (OHSP), for use at occupational health conferences and other outreach opportunities. An overview presentation of the occupational health indicators was given to safety engineers at the Texas Department of Insurance- Spring Safety Summit May 2010.

TXDSHS met with Southwest Center for Agricultural Health, Injury Prevention, and Education –Tyler, Texas to discuss possible collaboration and the use of GIS mapping to further goals of educating the public about occupational injuries and illnesses in Texas. Staff developed and disseminated an educational booklet for workers in the NORA sectors of "Healthcare & Social Assistance" and "Services" who may be at risk of acute exposure to disinfectants (disinfectants are considered pesticides under the Federal

Insecticide, Fungicide, and Rodenticide Act - FIFRA). The booklet also can be used by healthcare providers to take a more accurate occupational health history.

Texas program coordinator, Brienne Diebolt-Brown was elected chair of the Consortium of Occupational State-based Surveillance (COSS) to lead the planning of occupational health topics for the 2011 CSTE conference.

Potential/Intermediate/End Outcomes

The Fundamental Program has worked this year toward enhancing the usefulness of the occupational health indicator data by gathering ideas for research questions, projects, and publications. Much effort was placed in finding university, public and private sector stakeholders who can provide feedback on current analyses and guide future analyses. Many of these stakeholders may be able influence practices, legislation, and product design. Reductions in work-related morbidity, mortality, and exposure have not yet been identified.

Plans for the Next Year

The program will obtain and report data on two additional occupational health indicators (for a total of 15); complete analysis of Census of Fatal Occupational Injuries (CFOI); produce an on-line status report of occupational health indicators for Texas; present information on occupational injuries common to farmworkers at the National Farmworkers' Association (MAFO) in March 2011 and the Texas Department of Agriculture field inspector training in April 2011. TXDSHS plans to partner with the Southwest Center for Agricultural Health, Injury Prevention, and Education, University of Texas to provide training opportunities to graduate students studying occupational health issues. The Texas Occupational Health Indicators website will be made more interactive and user friendly. TXDSHS will conduct a follow-up evaluation of the program according to the CDC's Framework for Program Evaluation in Public Health and the Updated Guidelines for Evaluation Public Health Surveillance System;

**Texas Occupational Health and Safety Surveillance: Pesticide Exposure
Surveillance Program
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Tel: 512-458-7269; Fax: 512-458-7222; Email: John.Villanacci@dshs.state.tx.us

Brienne Diebolt-Brown, M.S. – Program Coordinator

Tel: 512-458-7269; Fax: 512-458-7222; Email: brienne.brown@dshs.state.tx.us

The overall aims of the Texas Pesticide Exposure Surveillance in Texas (PEST) project are to: maintain and expand data collection to assess magnitude of acute occupational pesticide poisoning in Texas, to analyze data and disseminate findings, enhance follow-up investigation procedures for reported exposures to identify causes and trends associated with occupational pesticide exposures, to implement strategies for industry-workplace interventions, to disseminate findings to partners, and collaborate with NIOSH, EPA, and others to identify occupations and risk factors of particular concern.

Major Accomplishments and Outputs

The Program contributed data for an article in Environmental Health Perspectives regarding drift exposures in agricultural settings, an article in Clinical Toxicology regarding fipronil exposure, and conducted an in depth analysis using data from its surveillance system to obtain the incidence of acute occupational pesticide exposures in Texas (2005-2009). Materials with some of these findings were created and disseminated to health care providers and safety engineers. To increase awareness of the Texas Occupational Disease Reporting law, specifically survey findings of physician awareness of the requirement to report acute occupational pesticide exposure, staff presented posters illustrating results of a short survey at the Texas Rural Health Forum and the Agricultural Safety and Health Council of America/National Institute for Occupational Safety and Health (ASHCA-NIOSH) conference.

The Texas program hosted the annual Winterfest pesticide surveillance meeting in Austin, February 2010, among SENSOR (Sentinel Event Notification System for Occupational Risk) and non-SENSOR states and federal partners (NIOSH and the EPA).

The Scientific Advisory Committee (SAC) was strengthened with the addition of representatives of the Association of Occupational Health Nurses, Texas Ergonomics Roundtable, and the U.S. Environmental Protection Agency, to existing SAC members (Texas Department of Agriculture, Texas Department of Insurance, the Texas Rural Health Association, National Farmworkers Association, Migrant Clinicians Network, Texas Border Health, the Department of Labor, OSHA, and the deans of the University of Texas Southwest Center for Occupational Health in Houston, Tyler, and San Antonio, TX). Information on pesticide exposure, heat exposure, transportation mortality and mesothelioma was shared with these stakeholders.

The program coordinator worked with Texas Hospital Association and Texas Medical Association to educate members about reporting rules for occupational pesticide

exposure. July 2010, TXDSHS developed a presentation for TX Department of Transportation safety and health area conference in Fort Worth promoting pesticide safety with an emphasis on occupational exposures and disseminating exposure reporting and prevention awareness materials as well. Adding the link to Wikipedia doubled the number of web hits to the program's website:

<http://www/dshs.state.tx.us/epitox/pest.shtm>

Potential/Intermediate/End Outcomes

Contributed data for a Morbidity and Mortality Weekly (MMWR) report on disinfectants used in healthcare settings, [Acute Antimicrobial Pesticide-related Illnesses among Workers in Health-care Facilities - California, Louisiana, Michigan, and Texas, 2002-2007.](#); this report was picked up by the Journal of the American Medical Association (JAMA) July 2010.

The Program has worked this year to become familiar with the data and data sources, but also to plan questions for research projects and publications. Much effort was placed in finding university, public and private sector stakeholders who can provide feedback on current analysis and guide future analysis. Many of these stakeholders may be able influence practices, legislation, and product design. As yet, there are no documented reductions in work-related morbidity, mortality, and exposure.

Plans for Next Year

TXDSHS will analyze pesticide data in depth for industry, occupation, ethnicity, gender, and pesticide class, and share results through publications in MMWR or journals; through posters and presentations such as at the Texas Rural Health Forum and the joint Agricultural Safety and Health Council of America and National Institute for Occupational Safety and Health (ASHCA-NIOSH) conference.

The program will partner with the Texas Poison Center Network to reevaluate the numbers of calls about total release foggers to evaluate public awareness of their danger.

An enhanced version of 2008's provider awareness survey of pesticide exposure reporting will be created, administered, and compared to previous survey results to learn if more providers have become aware of the need to report potential pesticide poisonings.